

REMARKS

Claims 1-20 are now pending in the application. By this amendment, Claims 1, 4, 5, 6, 9, 10, 11, 14, 15, 16, 19, and 20 have been amended and Claims 3, 8, 13, and 18 have been cancelled without prejudice or disclaimer of the subject matter contained therein. The basis for these amendments can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendments and the following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance.

The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 6, 11 and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sargent (U.S. Pat. No. 535,999). This rejection is respectfully traversed.

Each of independent Claims 1, 6, 11, and 16 call for a linear recliner assembly having a cam biased into a first position by a biasing mechanism. The Examiner has admitted in making his rejection under 35 U.S.C. § 103(a) that Sargent fails to teach a biasing member that urges a recliner rod into engagement with a pawl. See Office Action at pg. 3. Accordingly, Applicant respectfully submits that this rejection is moot. Reconsideration and withdrawal of the rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 2-4, 7-9, 12-14, and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sargent (U.S. Pat. No. 535,999) in view of either Ferreira, Detloff et al. or Rogala (U.S. Pat. No. 4,865,386). This rejection is respectfully traversed.

Each of independent Claims 1, 6, 11, and 16 call for a linear recliner assembly having a cam biased into a first position by a biasing mechanism. As explained in the specification, the biasing mechanism acts on a cam (30) to thereby rotate the cam into engagement with a recliner rod (18). See Specification at pg. 5, Paragraph [0021]. Rotation of the cam into engagement with the recliner rod causes the recliner rod to rotate and engage a pawl (24) to thereby lock the recliner rod to the pawl and prevent translation of the recliner rod relative to a housing (12). See Specification at pg. 6, Paragraph [0022] and FIGS. 1 and 4.

The recliner assembly is configured to be mounted in a seat assembly (100) having a seat (102) and a seat back (104) with the recliner mechanism disposed generally between the seat and the seat back. See Specification at pg. 8, Paragraph [0026] and FIG. 5. The linear recliner mechanism permits rotation of the seat back relative to the seat when the recliner rod is disengaged from the pawl. See Specification at pg. 8, Paragraph [0026]. In this manner, the linear recliner mechanism allows a user to rotate the cam against the bias of the biasing mechanism to remove the recliner rod from engagement with the pawl and allow for angular adjustment of the seat back relative to the seat bottom. See Specification at pg. 8, Paragraph [0026].

The biasing mechanism ensures that the seat back returns to a locked condition (i.e., such that the seat back is restricted from rotating relative to the seat) once the adjustment is made to the seat back in an effort to prevent use of the seat when the seat is in an unlocked condition (i.e., when the recliner rod is disengaged from the pawl). In addition to ensuring that the seat returns to a locked condition after an adjustment, the biasing mechanism also ensures that the recliner rod is held tightly against the pawl when the recliner rod is in the locked position to prevent “chucking” by applying a force on the recliner rod via the cam when the recliner rod is in engagement with the pawl. See Specification at pg. 2, Paragraphs [0005] and [0006].

The biasing mechanism applies a force to the recliner rod via the cam to ensure that the recliner rod is tightly held in contact with the pawl such that when the seat is vibrated (i.e., installed in a moving or running vehicle, for example) the connection between the recliner rod and the pawl is restricted from rattling and producing noise. See Specification at pg. 2, Paragraphs [0005] and [0006]. Therefore, the biasing mechanism also accounts for manufacturing variations of respective components to prevent chucking, and thus, unwanted noise, during use.

As previously discussed, the Examiner has admitted that Sargent fails to teach a biasing mechanism acting on a recliner rod such that the recliner rod is biased into a locked position. However, the Examiner cites Ferreira (U.S. Pat. No. 1,821,298), Detloff (U.S. Pat. No. 4,865,386), and Rogala (U.S. Pat. No. 6,155,644) as teaching a biasing mechanism for forcing engagement between the pawl and the rod. Applicant respectfully submits that there is no teaching, suggestion or motivation to include a biasing mechanism in the chair of Sargent to prevent chucking during use.

Applicant notes that the recliner mechanism of Sargent is directed toward a chair assembly, as it is shown including casters or wheels, thereby indicating that the Sargent chair is intended for home or office use, rather than use in a moving vehicle. See Sargent at Col. 1, Ins. 7-11 and FIG. 1. Sargent would not be concerned with providing a tight fit between a recliner rod and a locking tooth in an effort to reduce rattling and noise from vehicle movement and vibration, and thus would not be motivated to include a biasing mechanism to take up manufacturing tolerances and prevent chucking. Therefore, Applicant respectfully submits that the present invention is not taught or suggested by the art of record and there is no motivation to modify Sargent as suggested by the Examiner.

Because there is no motivation or suggestion to provide the reclining chair of Sargent with a biasing mechanism in an effort to reduce chucking between a recliner rod and a pawl, Applicant's invention is not taught or suggested by the prior art and reconsideration and withdrawal of the rejection is respectfully requested.

In this manner, it is believed that independent Claims 1, 6, 11, and 16, as well as Claims 2-5, 7-10, 12-5, and 17-20, respectively dependent therefrom, are in a condition for allowance in light of the art of record. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 5, 10, 15, and 20 would be allowable if rewritten in independent form. Applicant has not incorporated the allowable subject matter of

dependent Claims 5, 10, 15, and 20 into respective independent Claims 1, 6, 11, and 16 in light of the foregoing remarks.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: November 22, 2004

By: 
Michael Malinzak, Reg. No. 43,770

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MM:ca